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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Joachim Lohr

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EXAMINER

WIN, AUNG T

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/583,736	<b>Applicant(s)</b> LOHR ET AL.	
	<b>Examiner</b> AUNG T. WIN	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) 1-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 42-65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION*****Drawings***

Since Figures 1-11 are known prior arts as indicated in the Background of specifications, Figures 1-11 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 53-62 & 65 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding Claim 6, cited claim limitations "operable to" renders the claim indefinite because "operable to" is typical of claim limitation, which may not distinguish over the prior art. It has been held that the recitation that an element such as "operable to" "adapted to" performing a function is not a positive limitation but only requires the

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ability to so perform.

### ***Claim Objections***

2. Claim 52 is objected to because of the following informalities: Claim 52 is **apparatus claim** which is dependent upon the **method** claim 1. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 42, 43, 45, 53, 54, 56, 47, 58 & 63 are rejected under 35 U.S.C. 102(e) as being anticipated by Konstantinos et al. (IEEE publication: MAC scheduling for Uplink Transmission in UMTS WCDMA: 0-7803-6728 publication date 06/2001).

3.1 Regarding Claim 42, Konstantinos discloses a data transmission method in a UMTS mobile communication system comprising the steps of:

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establishing a radio bearer between a mobile terminal and a radio access network, receiving, from the radio access network, information including a priority assigned to a logical channel that is mapped on a transport channel [inherent Radio Bearer Establishment procedure in UMTS] [Logical channels with priority: Table 1] and

indicating a scheduling mode out of plural scheduling modes of the logical channel [plural scheduling modes of the logical channel based on type of supported traffic: Table 2],

mapping the radio bearer to the logical channel based on the received information, and transmitting the data via the transport channel [A. Radio Bearer Configuration].

3.2 Claim 53 is the apparatus claim rejected for the same reason as stated above in Claim 1 because claim 53 disclose claim 1 discloses method substantially close to corresponding method executed by mobile terminal of claim 53.

3.3 Claim 63 is rejected for the same reason as stated above in Claim 1 because claim 1 discloses method substantially close to corresponding method executed by processor of mobile terminal of claim 63. Konstantinos's mobile terminal must comprise computer readable medium for storing instructions as claimed because mobile terminal is configured to process according to stored software instructions.

3.4 Claims 43 & 54 is rejected for the same reason as stated above in Claims 41 rejection. Konstantinos discloses the data transmission method according to claim 42 & 53, further comprising selecting a transport format combination to be used for transmitting data based on at least the priority assigned to the logical channel [see TFC disclosed in section II. MAC Layer functions in UMTS].

3.5 Claims 45 & 56 are rejected for the same reason as stated above in Claims 43 & 54 rejections.

Konstantinos discloses the data transmission method, wherein the data is transmitted using the selected transport format combination [see TFC selection as disclosed in section II. MAC Layer functions in UMTS & section A. Logical-transport channels configuration].

3.6 Claims 47 & 58 is rejected for the same reason as stated above in Claims 42 & 53 rejections. Konstantinos discloses the data transmission method, further comprising receiving signaling information from the radio access network indicating the scheduling mode of the radio bearer for indicating logical channels with different priorities and different scheduling modes i.e., voice mode, signalization mode or data www type traffic mode [see Table 1].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 44, 55, 46, 57, 48, 59, 52, 64 & 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konstantinos et al. (IEEE publication: MAC scheduling for Uplink Transmission in UMTS WCDMA: 0-7803-6728 publication date 06/2001) in view of Belaiche et al. (US20020136181A1).

4.1 Regarding Claims 44 & 55, Konstantinos discloses the data transmission method according to claims 43 & 54, but does not explicitly disclose setting a flag according to the indicated scheduling mode of the logical channel, and wherein the transport format combination is selected based on the flag and the priority assigned to the logical channel.

Belaiche discloses setting a flag and the transport format combination is selected based on the flag and the priority assigned to the logical channel [0018 & 0019].

Therefore, it would have been obvious to one of ordinary skilled in the art at the time of invention of made to modify the claimed mapping and data

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transmission method by implementing the flag setting as taught by Belaiche.

One of ordinary skilled in the art at the time of invention of made to do this to provide enhanced data transmission method.

4.2 Claims 46 & 57 are rejected for the same reason as stated above in Claims 44 & 53 rejections. The method as modified above would teach the data transmission method as cited in Claims 46 & 57, further comprising multiplexing the data to the transport channel based on a flag set according to the indicated scheduling mode of the logical channel and the priority assigned to the logical channel because modified method teaches mapping logical channels with transport channels based on flag setting as stated above.

4.3 Claims 48 & 59 is rejected for the same reason as stated above in Claims 44 & 53 rejections. The method as modified above would teach the data transmission method, wherein a flag set according to the indicated scheduling mode indicates whether to prioritize the transmission of the data on the logical channel for providing users with quality of service.

4.4 Claim 52 is rejected for the same reason as stated above in Claim 44 rejections because the method as modified would teach setting at the mobile



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terminal a flag according to the indicated scheduling mode of the logical channel [see claim 44 rejection].

4.5 Claims 64 & 65 are rejected for the same reason as stated above in Claims 44 & 55 rejections because Konstantinos discloses the data transmission method, wherein the data is transmitted using the selected transport format combination [see TFC selection as disclosed in section II. MAC Layer functions in UMTS & section A. Logical-transport channels configuration].

5. Claims 49 & 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konstantinos et al. (IEEE publication: MAC scheduling for Uplink Transmission in UMTS WCDMA: 0-7803-6728 publication date 06/2001) in view of applicant admitted prior art in the background section of applicant's specification.

5.1 Regarding Claims 49 & 60, Konstantinos discloses the data transmission method according to claim 42 and further discloses that the data is transmitted on dedicated uplink channel [Abstract]. Konstantinos does not explicitly teach that dedicated uplink channel is an enhanced dedicated uplink channel. Applicant discloses that data is transmitted on an enhanced dedicated channel in UMTS network according to new MAC functional entity [0021-0029]. Therefore,

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it would have been obvious to one of ordinary skilled in the art at the time of invention of made to modify according to new MAC function entity to transmit data on E-DCH. One of ordinary skilled in the art at the time of invention of made to do this to provide enhanced communication service.

6. Claim 50 & 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konstantinos et al. (IEEE publication: MAC scheduling for Uplink Transmission in UMTS WCDMA: 0-7803-6728 publication date 06/2001) in view of Beckmann et al. (US20030007517A1).

6.1 Regarding Claims 50 & 61, Konstantinos discloses the data transmission method according to claim 42 but does not explicitly disclose that the radio bearer is mapped on at least two logical channels each being assigned a priority. Beckmann discloses such feature [see Figure 2]. Therefore, it would have been obvious to one of ordinary skilled in the art at the time of invention of made to modify the Konstantinos data transmission method as taught by Beckmann so that the radio bearer is mapped on at least two logical channels each being assigned a priority as claimed. One of ordinary skill in the art at the time of invention of made to do this to optimize the mobile network.

7. Claims 51 & 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konstantinos et al. (IEEE publication: MAC scheduling for

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Uplink Transmission in UMTS WCDMA: 0-7803-6728 publication date 06/2001)

in view of applicant's admitted prior art 3GPP TR 25.896 V6.0.0 (2004-03).

7.1 Regarding Claim 51 & 62, Konstantinos discloses the data transmission method according to claim 42, wherein the different scheduling mode for different data traffic type as stated above [also see Table 1]. Konstantinos does not explicitly disclose that scheduling mode is either a time and rate controlled scheduling mode or a rate controlled scheduling mode.

Admitted prior art teaches that co-existence of different scheduling modes is provided the flexibility in serving the different traffic types [section 7.1.2.4].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention of made to modify Konstantinos data transmission method to implement claimed scheduling mode as taught by 3GPP publication. One of ordinary skill in the art at the time of invention of made to do this to provide flexibility in serving the different traffic data types.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AUNG T. WIN whose telephone number is (571)272-7549. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on (571) 272-7503. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung T Win/  
Examiner, Art Unit 2617  
June 20, 2008

/Duc Nguyen/  
Supervisory Patent Examiner, Art Unit 2617